

IN THE CLAIMS:

9. (Thrice amended) A process for the production of plants with improved growth characteristics, which comprises the following steps:

- D4
- a) transferring and integrating a nucleic acid encoding a polypeptide coding region comprising a prokaryotic asparagine synthetase coding region linked to a chloroplast leader sequence for import of the asparagine synthetase into chloroplasts or plastids of a plant cell, wherein said nucleic acid is operatively linked to a regulatory sequence for expression in said plant cell;
 - b) transferring and integrating a nucleic acid for expression of an antisense chloroplastic glutamine synthetase RNA or portion thereof comprising transferring and integrating an anti-sense chloroplastic glutamine synthetase nucleic acid operatively linked to a regulatory sequence for expression of said anti-sense RNA or portion thereof in said cell to make a transformed cell; and
 - c) regenerating intact and fertile plants from the transformed cells.

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11. (Thrice amended) A plant cell obtainable by the method of claim 9, comprising:

- a) a nucleic acid encoding a polypeptide coding region comprising a prokaryotic asparagine synthetase coding region linked to a chloroplast leader sequence for import of the asparagine synthetase into chloroplasts or plastids of a plant cell, wherein said nucleic acid is operatively linked to a regulatory sequence for expression in said plant cell; and
- b) a second nucleic acid for expression of an anti-sense RNA to an endogenous chloroplastic glutamine synthetase gene or portion thereof comprising a nucleic acid comprising an endogenous chloroplastic glutamine synthetase or portion thereof in an anti-sense orientation operatively linked to a regulatory sequence, said second nucleic acid providing reduced levels of endogenous chloroplastic glutamine synthetase activity upon expression of said anti-sense RNA in said cell.

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12. (Amended) A plant, seed or propagule containing a cell according to claim 11.

13. (Twice amended) A gene construct comprising a nucleic acid encoding a polypeptide coding region comprising a prokaryotic ammonium specific asparagine synthetase coding region linked to a chloroplastic leader sequence for import of the asparagine synthetase

into the chloroplasts or plastids of a plant cell, and which construct is operatively linked to a regulatory sequence for expression in said plant cell, and wherein said plant cell exhibits the biochemical activity of the imported asparagine synthetase in its chloroplasts or plastids.

03 14. (Twice amended) A gene construct according to claim 13, wherein the prokaryotic asparagine synthetase polypeptide coding region is linked at its N-terminus to a modified transit peptide coding region from the small subunit of the Ribulosebisphosphate carboxylase from pea comprising a duplication of 20 amino acids from said transit peptide coding region.

15. (Thrice amended) A vector comprising the gene construct according to claim 13.

16. (Amended) A plant cell transformed with the gene construct according to claim 13 or 14, or with the vector according to claim 15.